

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
```

```
char g[] = "1000100000011110", p[50], c[50];
int n1, n2;
```

```
void xor()
```

```
{
    int j;
    j = 0;
    while (j < n1)
    {
        if (c[j] == g[j])
        {
            c[j] = '0';
        }
        else
        {
            c[j] = '1';
        }
        j++;
    }
}
```

```

void xor()
{
    int i, cnt;
    for (cnt = 0; cnt < n1; cnt++)
    {
        C[cnt] = p[cnt]
    }
    do
    {
        if (C[0] == '1')
        {
            xor();
        }
        for (i = 0; i < n1 - 1; i++)
        {
            C[i] = C[i+1];
        }
        C[i] = p[cnt++];
    } while (cnt < n2 + n1);
}

```

```

void main()
{
    int i;
    printf("Enter code:");
    scanf("%s", p);
    n1 = strlen(g);
    n2 = strlen(p);
}

```



```
for (i = n2; i < n2 + n1; i++)
```

```
    p[i] = xxi-n2 '0';
```

```
printf ("
```

```
calc();
```

```
printf ("Checksum is : %s", p);
```

```
printf (" \t Current code : %s", g);
```

```
for (i = n2; i < n2 + n1; i++)
```

```
{    p[i] = c[i - n2];
```

```
}
```

```
printf ("Transmitted code : %s \t", p);
```

```
printf ("Re enter code \n");
```

```
scanf ("%s", p);
```

```
calc();
```

```
for (i = 0; i < strlen(c); i++)
```

```
{    if (c[i] == '1')
```

```
{        printf ("Error!!");
```

```
        exit(0);
```

```
    }
```

```
    }
```

```
}
```